

# **ABSTRACT**

The invention includes viral vectors (e.g., retroviral vectors, e.g., replication deficient retroviral vectors), libraries comprising such vectors, retroviral particles produced by such vectors, retroviral packaging cell lines for production of these particles, integrated proviral sequences derived from the retroviral particles, circularized provirus sequences and mammalian cells upon which the provirus has been introduced. The invention also includes methods of using such sequence, vectors, particles and cells.

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